

Name: _____ N.B. p. _____

Atomic Models Study Guide

Single/Science

1. List the maximum # of electrons each energy level can hold:

1—

3--

5--

2—

4—

2. What are valence electrons? Also, explain why they are important.

3. If an atom has LESS than 8 electrons in its outermost energy level, it will be _____ . The element, _____ is an exception to this rule; it is stable with _____ electrons.

4. State the valence electron # for each group:
Group 1 = Group 15 =
Group 2 = Group 16 =
Group 13 = Group 17 =
Group 14 = Group 18 =

5. Electron Dot Diagrams can also be called _____ .

6. Electron Dot Diagrams show _____ electrons & _____ .

7. Draw Bohr models for each:

Aluminum

Chlorine

Oxygen

Neon

Iron
(2 valence electrons)

Argon

8. Draw Electron Dot Diagrams for each:

Boron

Carbon

Nitrogen

Oxygen

Sodium

Calcium

Potassium

Xenon

LiCl

MgCl₂

Na₂O

NH₃

Na₃N

RbI

CaCl₂

H₂O